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ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR C11
PLANO, TX 75024

EXAMINER

QUINONES, ISMAEL C

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/736,323

Applicant(s)

LUNDQVIST ET AL.

Examiner

Ismael Quiñones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on September 22, 2004.

Claims 1-25 are still pending in the present application. **This Action is made FINAL.**

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 23 and 24** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The disclosure and the drawings of the present application fails to mention how the size of the difference is determined or calculated and how the difference level itself can be used for determining whether a new cell belongs to any group to which no member of the active set belongs. A person with ordinary skill in the art will not be able from the disclosure or the drawings to determine whether a new cell belongs to any group to which no member of the active set belongs depending upon the size of the difference level or the difference level itself.

4. **Claim 25** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described

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in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation of a candidate cell being compared with two different thresholds for determining if said candidate cell should be added into an active list introduces new matter. The specification and drawings of the instant application fail to disclose either implicitly or explicitly the use of a first and a second threshold to determine whether or not a candidate cell should be added into the active list.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1-3, 10-14, 21-25** are rejected under 35 U.S.C. 102(e) as being anticipated by Haberman et al. (U.S. Pat. No. 6,035,197).

Regarding **claims 1 and 12** Haberman et al. disclose a mobile cellular telecommunications network employing macro-diversity and a method for controlling the same (A method and a system for establishing various radio connections over the same radio spectrum in a CDMA system; *col. 2, line 64 thru col. 3, line 4*), wherein a mobile

station can establish a plurality of simultaneous radio links with digital cells (Wherein the digital cells can be digital/analog cells both digital cellular communications and analog cellular communications; *col. 7, lines 14-20*) in the network (Base stations comprising scanning receivers and pilot signal transmitters for establishing simultaneous radio connections over the same radio spectrum in a CDMA cellular communication system, furthermore generating an ACTIVE SET for identifying radio connections associated with cells through which the mobile station is communicating; *col. 1, lines 36-40; col. 2, lines 47-51; col. 9, lines 2-6; Fig. 1, items 50 and 51*), wherein the digital cells of the network are considered in groups (A cellular communication system having a digital portion including a group of digital cells and an analog portion including a group of analog cells; *col. 7, lines 11-24; Fig. 1*), and wherein, when determining whether to establish a new radio link between a mobile station and a new digital cell, the network applies a quality criterion to the new link (Classifying pilot signals associated with a cell into an active set according to a satisfied criteria; *col. 9, lines 2-6*), which depends on whether the new digital cell belongs to any group with which the mobile station does not already have a link (Wherein a mobile station has already establish communications with the digital portion or group of the system, and wherein the new candidate cell is an analog cell to which the mobile station does not already have a link, furthermore an active set being exclusively comprised of digital cells, until the mobile station is handed off to an analog cell; *col. 9, lines 33-46; col. 10, lines 29-67; Fig. 3*).

Regarding **claim 2 and claim 13**, and as each applied respectively to claim 1 and claim 12, Haberman et al. disclose the aforementioned mobile cellular

telecommunications network and method for controlling the same, wherein the network applies a more easily satisfied criterion to the establishment of a new link with a digital cell (Wherein the digital cells can be digital/analog cells both digital cellular communications and analog cellular communications; *col. 7, lines 14-20*) in one or more groups with which the mobile station already has a link (Wherein if the candidate cell integrates the digital group of cells a more easily satisfied criteria is applied in order to determine eligibility for the ACTIVE SET; *col. 10, lines 9-16; Fig. 3, steps S2 and S4*), and a less easily satisfied criterion to the establishment of a new link with a cell in a group with which the mobile station currently has no link (Wherein if the candidate cell integrates the analog group of cells a second criteria or less easily satisfied criteria is applied in order determine eligibility for handing off communications to an analog cell; *col. 10, lines 45-50; Fig. 3, steps S4 and S6*).

Regarding **claim 3 and claim 14**, and as each applied respectively to claim 1 and claim 12, Haberman et al. disclose the aforementioned mobile cellular telecommunications network and method for controlling the same, wherein the quality criterion relates to a signal quality level (Wherein the quality criteria relies upon the pilot signal strength of the candidate cell and an active set; *col. 10, lines 6-16*).

Regarding **claim 10 and claim 21**, and as each applied respectively to claim 1 and claim 12, Haberman et al. disclose the aforementioned mobile cellular telecommunications network and method for controlling the same, wherein each mobile station has an active list of digital cells to which it has radio links (An active set which identifies pilot signals or radio connections associated with cells through which the

mobile station is to communicate; *col. 9, lines 7-9*), and the criteria for establishing a new radio link are set relative to the quality of the radio links to cells on the active list (Measuring the pilot signals from the cells in the active set and determining whether the signal strength of those cells in the active set exceeds a predetermined threshold; *col. 10, lines 45-60*).

Regarding **claim 11 and claim 22**, and as each applied respectively to claim 1 and claim 12, Haberman et al. disclose the aforementioned mobile cellular telecommunications network and method for controlling the same, which uses Code Division Multiple Access (*col. 7, lines 11-16*).

Regarding **claims 23 and 24** Haberman et al. disclose a mobile cellular telecommunications network employing macro-diversity and a method for controlling the same (A method and a system for establishing various radio connections over the same radio spectrum in a CDMA system; *col. 2, line 64 thru col. 3, line 4*), wherein a mobile station can establish a plurality of simultaneous radio links with digital cells (Wherein the digital cells can be digital/analog cells both digital cellular communications and analog cellular communications; *col. 7, lines 14-20*) in the network (Base stations comprising scanning receivers and pilot signal transmitters for establishing simultaneous radio connections over the same radio spectrum in a CDMA cellular communication system, furthermore generating an ACTIVE SET for identifying radio connections associated with cells through which the mobile station is communicating; *col. 1, lines 36-40; col. 2, lines 47-51; col. 9, lines 2-6; Fig. 1, items 50 and 51*), the digital cells with which the mobile station has established radio links being defined as an active set (Classifying pilot

signals associated with a cell into an active set according to a satisfied criteria; *col. 9, lines 2-6*), wherein the digital cells of the network are considered in groups (A cellular communication system having a digital portion including a group of digital cells and an analog portion including a group of analog cells; *col. 7, lines 11-24; Fig. 1*), and wherein the network determines whether to establish a new radio link between a mobile station and a new digital cell, by determining whether a quality value of the new radio link exceeds a threshold set at a difference level below a best digital cell in the active set (Wherein if a pilot signal associated with an analog cell exceeds a predetermined threshold "Threshold₁" set below the best cell in the active set, said pilot signal associated with the analog cell can be included in a candidate set, if subsequently any of the pilot signals including the best cell in the active set do not exceed a second predetermined threshold "T_{drop}", said pilot signal associated with the analog cell a handoff message is sent to the mobile station to tune to an analog frequency of the analog cell; *col. 10, lines 45-60; Fig. 3*), the size of the difference level depending on whether the new digital cell belongs to any group to which no member of the active set belongs (Wherein the new cell is an analog cell and the cells in the active set are digital cells; *col. 9, lines 42-47; col. 10, lines 45-60*).

Regarding **claim 25**, Haberman et al. disclose method for performing a handover in a mobile telecommunications network (A method for providing handoff in a cellular telecommunication network; *col. 6, lines 19-24*), the method comprising: allocating a plurality of network digital cells (Wherein the digital cells can be digital/analog cells both digital cellular communications and analog cellular communications; *col. 7, lines 14-20*)

into a plurality of groups (A cellular communication system having a digital portion including a group of digital cells and an analog portion including a group of analog cells; *col. 7, lines 11-24; Fig. 1*); providing a mobile station adapted to establish a plurality of simultaneous radio connections with the plurality of network digital cells (Base stations comprising scanning receivers and pilot signal transmitters for establishing simultaneous radio connections over the same radio spectrum in a CDMA cellular communication system, furthermore generating an ACTIVE SET for identifying radio connections associated with cells through which the mobile station is communicating; *col. 1, lines 36-40; col. 2, lines 47-51; col. 9, lines 2-6; Fig. 1, items 50 and 51*); establishing an active set of digital cells for the mobile station wherein the active set of digital cells establish radio connections with the mobile station (Classifying pilot signals associated with a cell into an active set according to a satisfied criteria; *col. 9, lines 2-6*), and wherein at least one digital cell in the active set is a member of a first group of the plurality of groups (Wherein the ACTIVE SET can comprise digital cells which integrate the digital portion or group of the cellular communication system; *col. 7, lines 11-24; Fig. 1*); determining if a candidate digital cell should be added to the active set of digital cells (*Fig. 3*); wherein the determining comprises: determining if the candidate digital cell is a member of the first group (Determining if the pilot signal associated with the candidate cell is either a digital or analog cell; *col. 10, lines 30-32; Fig. 3, step S4*); if the candidate digital cell is a member of the first group, then applying a first threshold standard to determine if the candidate digital cell should be added to the active set (If the candidate cell integrates the digital group of cells a first predetermined threshold T_{h1} is applied in order to determine

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eligibility for the ACTIVE SET; *col. 10, lines 9-16; Fig. 3, steps S2 and S4*); if the candidate digital cell is not a member of the first group, then applying a second threshold standard to determine if the candidate digital cell should be added to the active set (If the candidate cell integrates the analog group of cells a second predetermined threshold value T_{drop} is applied in order to determine eligibility for handing off communications to an analog cell; *col. 10, lines 45-50; Fig. 3, steps S4 and S6*).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 4 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Haberman et al. (U.S. Pat. No. 6,035,197) in view of Achour et al. (WO 01/03464).

Regarding **claim 4** and **claim 15**, and as each applied respectively to claim 1 and claim 12, Haberman et al. disclose the aforementioned mobile cellular telecommunications network and method for controlling the same. Haberman et al. fail to clearly specify a relationship between the time period in which a signal quality level is satisfied and the mobile telecommunications network.

In the same field of endeavor, Achour et al. disclose a signal quality criteria for a respective base station threshold in which the time period (handoff transition) or “time drop” depends upon the threshold uphold (*Page 2, lines 18–23*).

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention was made to have Haberman et al. mobile cellular telecommunications network and method for controlling the same to uphold a signal in between cell groups when the performance level falls or exceeds a threshold as taught by Achour et al. for the purpose of allowing better continuity when the mobile station is transitioning between groups avoiding to drop the previous radio link establishment.

10. **Claims 5-7 and 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Haberman et al. (U.S. Pat. No. 6,035,197) in view of Lind et al. (U.S. Pat. No. 6,163,694).

Regarding **claim 5** and **claim 16**, and as each applied respectively to claim 1 and claim 12, Haberman et al. disclose the aforementioned mobile cellular telecommunications network and method for controlling the same. Haberman et al. fail to clearly specify, wherein a plurality of layers of groups can be defined, such that each digital cell may be in one group within each layer.

In the same field of endeavor, Lind et al. disclose a method and an apparatus for standby state cell selection in a layered cellular telephone system, comprising a plurality of layers of groups (macro/“umbrella” cell, micro cell, and micro cell), each cell being in one group within each layer (*Fig. 1, col. 2, line 67 thru col. 3, line 7*).

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention was made to have Haberman et al. mobile cellular telecommunications network and method for controlling the same to categorize different groups of cells into hierarchical layers as taught by Lind et al. for the purpose of providing an enhanced level of capacity which can be configured for individual circumstances and which provides services despite an extremely high demand within a very small geographical area.

Regarding **claim 6 and claim 17**, and as each applied respectively to claim 5 and claim 16, Haberman et al. in view of Lind et al. disclose the aforementioned mobile cellular telecommunications network and method for controlling the same. In addition Lind et al. disclose an umbrella or macro cell served by a base station as a high hierarchy level overlaying a group of micro cells located within the overall coverage area of the macro cell (*col. 1, lines 49-59*).

Regarding **claim 7 and claim 18** and as each applied respectively to claim 5 and claim 16, Haberman et al. in view of Lind et al. disclose the aforementioned mobile cellular telecommunications network and method for controlling the same. In addition Haberman et al. disclose wherein cells associated with one radio network controller are

considered to be in the same group (MTSO; *col. 1, lines 23-27; col. 2, lines 27-31; Fig. 1, item 30*).

11. **Claims 8-9 and 19** are rejected under 35 U.S.C. 103(a) as unpatentable Haberman et al. (U.S. Pat. No. 6,035,197) in view of Lind et al. (U.S. Pat. No. 6,163,694), further in view of Rinne et al. (U.S. Pat. No. 6,574,473).

Regarding **claim 8 and claim 19**, and as each applied respectively to claim 5 and claim 16, Haberman et al. in view of Lind et al. disclose the aforementioned mobile cellular telecommunications network and method for controlling the same. In addition Lind et al. disclose a plurality of digital cell groups each associated with a serving base station (A plurality of macro cells each served by a base station as a high hierarchy level overlaying a group of micro cells located within the overall coverage area of the macro cell; *col. 1, lines 49-59; col. 3, lines 32-36; Fig. 1, items L1, C1-CN*). Furthermore, in addition, Haberman et al. discloses wherein digital cells associated with a radio network controller are considered to be in another group (MTSO that control handoff operations among a cell group; *col. 1, lines 23-27; col. 2, lines 27-31; Fig. 1, item 30*). Haberman et al. in view of Lind et al. fail to clearly specify wherein digital cells associated with a second radio network controller are considered to be in a group.

In the same field of endeavor, Rinne et al. disclose a 3rd generation cellular system comprising plurality of radio network controllers (*Fig. 4, RNC*) each associated with a plurality of base stations (*Fig. 4, BS*) or cell groups (*col. 3, lines 9-18; Figure 4; Fig. 7*); the base stations and cells groups as an integral part of the telecommunications network.

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention was made Haberman et al. in view of Lind et al. disclose the aforementioned mobile cellular telecommunications network and method for controlling the same comprising a singular radio network controller to include a plurality of network controllers compounding an entire communications network as taught by Rinne et al. for the purpose of categorizing the parameters and the criteria for priority radio link establishment selection in a telecommunications network employing macro-diversity.

Regarding **claim 9**, and as applied to claim 5, Haberman et al. in view of Lind et al. disclose the aforementioned mobile-layered cellular telecommunications network, wherein a less satisfied and a more satisfied network quality criterion for the establishment of radio links is applied to cells groups associated with a base station, Haberman et al. in view of Lind et al. fail to clearly specify a network quality criterion for the establishment of radio links with cell groups associated with a radio network controller (base station controller) which the mobile station currently has no radio link.

In the same field of endeavor Rinne et al. disclose a criterion for cell groups associated with a radio network controller (base station controller) for the establishment of radio links with a mobile station, where handover between radio network controllers are made based on the transition of the mobile station between the cells (coverage areas) provided by the base stations where such base stations are associated with different radio network controllers (*col. 1, lines 53-59; col. 4, lines 45-48; col. 4, lines 56-58*).

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention was made to have Haberman et al. in view of Lind et al. mobile-

layered cellular telecommunications network including a quality criterion for the establishment of radio links with cells associated with different radio network controllers as taught by Rinne et al. for the purpose of enhancing radio communications performance when a mobile station movement is transitioning within a relative great scale, furthermore enhancing the reliability of such components establishing radio links about the telecommunications network.

12. **Claim 20** is rejected under 35 U.S.C. 103(a) as unpatentable over Haberman et al. (U.S. Pat. No. 6,035,197) in view of Rinne et al. (U.S. Pat. No. 6,574,473).

Regarding **claim 20**, and as applied to claim 12, Haberman et al. disclose the aforementioned method, wherein a less satisfied and a more satisfied network quality criterion for the establishment of radio links is applied to digital cells groups associated with a base station. Haberman et al. fail to clearly specify a network quality criterion for the establishment of radio links with digital cell groups associated with a radio network controller (base station controller) which the mobile station currently has no radio link.

In the same field of endeavor Rinne et al. disclose a criterion for cell groups associated with a radio network controller (base station controller) for the establishment of radio links with a mobile station, where handover between radio network controllers are made based on the transition of the mobile station between the cells (coverage areas) provided by the base stations where such base stations are associated with different radio network controllers (*col. 1, lines 53-59; col. 4, lines 45-48; col. 4, lines 56-58*).

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention was made to have Haberman et al. method for controlling a mobile cellular telecommunications network including a quality criterion for the establishment of radio links with cells associated with different radio network controllers as taught by Rinne et al. for the purpose of enhancing radio communications performance when a mobile station movement is transitioning within a relative great scale, furthermore enhancing the reliability of such components establishing radio links about the telecommunications network.

Response to Arguments

13. Applicant's arguments filed September 22, 2004 have been fully considered but they are not persuasive.

14. In response to Applicant's arguments against claims rejections under 35 U.S.C. § 112, first paragraph that there is enablement throughout the specification and drawings for the subject matter addressed on the rejections pertaining to claims 23-25, the Examiner respectfully disagrees.

For claims 23 and 24 the Applicant asserts that support may be found on how the size of the difference is determined or calculated and how the difference level itself can be used for determining whether a new cell belongs to any group to which no member of the active set belongs, furthermore admitting that the term "a threshold set at a difference level" is not used throughout the Specification, therefore acknowledging uncertainty on how one with ordinary skill in the art would recognize and associate the aforesaid claimed subject matter with the

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disclosure which in addition is missing and not directly and clearly linked throughout the disclosure. Applicant states that after reading the Specification (page 8, lines 3 to 6, and pages 8, lines 19-26) a person with ordinary skill in the art would recognize that the “difference level” may be just a delta between the threshold amount relating to the best digital cell and the threshold required when aspects of the invention are implemented, furthermore that the required threshold amount level for the various embodiments of the invention is a function of the costs and penalties associated the particular situation citing for example portions of the Specification (page 8, lines 28-34) as:

“The costs associated with the zones can differ, making it easier for a mobile station belonging to zone 1 to establish links-with cells in zone 2 than for a mobile station belonging to zone 2 to establish links with cells in zone 1, or vice versa, if desired. Moreover the costs can be varied by the network operator at different times etc.”

The Examiner respectfully disagrees on how the Applicant correlates the portions cited of the disclosure on how the size of the difference is determined or calculated and how the difference level itself can be used for determining whether a new cell belongs to any group to which no member of the active set belongs, wherein there is no mention nor a clear indication on any difference level or its dependence upon belonging to any particular group in the explanations provided by the Applicant based on costs and penalties neither in the Specification, that would have enable a person with ordinary skill in the art to know the size of a difference level in addition to a somehow relationship between a costs and penalties from the cited portions of the Specification by Applicant.

Applicant also asserts that given the Specification and the predictability of the art, anyone skilled in the art would know how to assign costs and penalties, and therefore determine a difference level of the thresholds. It is not clear if Applicant admits that it would have been obvious to determine a difference level of the thresholds based on the predictability of the art and what is known in the prior art (*The more that is known in the prior art about the nature of the invention, how to make, and how to use the invention, and the more predictable the art is, the less information needs to be explicitly stated in the specification*), thus admitting obviousness over the prior art in regards to the claimed subject matter contradicting that to which Applicant refers previously as to reasons for novelty and distinction over the prior art:

"The Applicant has searched the cited references, but could not locate where the element of "determining whether a quality value of the new radio link exceeds a threshold set at a difference level below a best cell in the active set, the size of the difference level depending on whether the new cell belongs to any group to which no member of the active set belongs" is taught by the cited references. Because all elements are not taught by the combination of the cited references, it is respectfully submitted that the Office Action does not factually support a prima facie case of obviousness for claim 23 based on the combination of Ishikawa, Anchor and Rinne.

Claim 24 contains elements and limitations similar to claim 23. Therefore claim 24 is allowable for the same reasons that claim 23 is allowable..."

For claim 25 the Applicant maintains that support for the claimed subject matter can be found throughout the Specification, and that one skilled in the art would know that the various

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thresholds are functions of the penalties and costs, citing for example portions of the Specification (page 8, lines 28-34) as:

“Thus, if for example the active set at one moment consists of cell A.a only, there is no penalty associated with cells A.b or A.c, since they both belong to the same handover zones as cell A.a. Thus radio links to those cells can be added if they meet the usual thresholds.

However, adding cell B.b would mean introducing handover zone 2, and a radio link to this cell is added only if the required threshold is met even after application of the penalty associated with handover zone 2.”

The Examiner respectfully disagrees on how the Applicant correlates the portions cited of the disclosure for the claimed subject matter under claim 25, as there is no mention nor a clear indication of two thresholds for determining the claimed subject matter, furthermore it is not clearly stated or shown on how the required threshold is different or the same when adding links for both cells when making both determinations according to the Specification, and in addition according to the claimed subject matter stating a single candidate digital cell (“the candidate digital cell”) if the Applicant is implying two different candidate digital cells based on that which Applicant cites as support for the claimed subject matter in the Specification showing two different candidate digital cells for adding links (*cell A.a and cell B.b*).

15. In response to Applicant’s arguments against claims rejections under 35 U.S.C. § 102 (e), and 35 U.S.C. § 103 (a) that Haberman et al. (US 6,035,197) alone or in combination does not divide the digital cells into groups, furthermore having no reason to divide the digital cells into groups, the Examiner respectfully disagrees.

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Haberman et al. do disclose, show, or suggest dividing digital cells into groups wherein the digital cells can be classified within a MAHO list and a reason for classifying them according to a handoff determination (*col. 8, lines 27-32*), furthermore Haberman et al. disclose wherein the digital cells can be digital/analog cells supporting both digital cellular communications and analog cellular communications (*col. 7, lines 14-20*).

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any response to this Office Action should be **faxed to** (703) 872-9306 or **mailed to:**

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

Art Unit: 2686

Hand-delivered responses should be brought to

Crystal Park II

2021 Crystal Drive

Arlington, VA 22202

Sixth Floor (Receptionist)

18. Any inquiry concerning this communication on earlier communications from the Examiner should be directed to Ismael Quiñones whose telephone number is (703) 305-8997.

The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.


19. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

20. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703) 305-4700 or call customer service at (703) 306-0377.

Ismael Quiñones

I.Q

January 26, 2005


RAFAEL PEREZ-GUTIERREZ
PATENT EXAMINER
2/6/05